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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,921	03/01/2002	Timothy P. Goggins	NG-31336	3798

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EXAMINER

KOYAMA, KUMIKO C

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 12/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/683,921

Applicant(s)

GOGGINS, TIMOTHY P.

Examiner

Kumiko C. Koyama

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2&3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the container (claim 35), the cup (claim 36) and the package (claim 37) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because of improper language.

"A lenticular bar code images is disclosed. The lenticular bar code image includes: a lenticular lens..." should be changed to --A lenticular bar code image including a lenticular lens...--

Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claims 10 and 31-33 are objected to because of the following informalities:

Re claim 10 (line 2): "ANSI" should be changed to --American National Standards Institute--.

Re claim 31 (line 4), 32-33 (line 5): UPC should be changed to --Universal Product Code (UPC)--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The applicant does not clearly define the term "C" in the phrase "at least a C" given in claim 10 line 2. The examiner respectfully requests the applicant to clearly define what is meant by "at least a C."

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

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(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

7. Claims 1-3, 22 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Clay (US 4,869,946, cited by the applicant).

Re claim 1 and 42: Clay shows a lenticular lens 10 having a front surface including a plurality of lenticules 11 and a back surface opposite the front surface (col 2 lines 57-59, Fig 1), an image 12 joined to the back surface of the lens (col 2 lines 62-67, Fig 1), and the image including a bar code 23 symbol having bars (col 3 lines 67+, Fig 3). Clay teaches that the lenticular lens and the image are in overlay relationship with one another (col 4 lines 57-60). Clay also teaches that a lenticular bar code angle is formed and may be perpendicular to the lenticules (col 4 lines 2-5, Fig 3). One in ordinary skill in the art would recognize that the bar code angle may be formed at the space between the bars and the lenticules. The bar code symbol remains substantially visible despite any movement of the lenticular bar code images (col 4 lines 2-5).

Re claim 2 and 3: an image is visible at all angles (col 4 lines 2-3).

Re claim 22: Clay shows that the image 12 is disposed between the lenticular lens 10 and the substrate 16 (Fig 1).

8. Claims 34-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Goggins (US 6,424,467).

Goggins teaches that a substrate may be a label, container, cup, and package (col 7 lines 23-27). Goggins also teaches a lenticular lens comprising a front surface including a plurality of lenticules and a flat back surface opposite the front surface, an image joined to the flat back

surface of the lens, the image including a bar code symbol having bars, wherein the bar code symbol is rotated to define a bar code rotation angle/arc angle between the bars of the bar code symbol and the lenticules of the lenticular lens (col 5 lines 11-23).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 4-6, 17 and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clay as applied to claim 1 above, and further in view of Bravenec et al (US 6,073,854).

Re claim 4, 6 and 38: Clay fails to teach that the bars of the bar code symbol are skewed with respect to the lenticules of the lenticular lens and are not aligned with the lenticules of the lenticular lens. Clay also fails to teach a bar code offset angle between the bars of the bar code symbol and the lenticules of the lenticular lens.

Bravenec shows that the lenticules of a sheet of lenticular material may be at an angle to the longitudinal axis (col 2 lines 24-30, Fig 1C).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to modify the teachings of Clay to the teachings of Bravenec and place a sheet of lenticular material having lenticules at an angle to the bars of the barcode symbol because a barcode symbol reader may misread the lenticules as one of the bars of the barcode symbol, and therefore the modification would avoid such misreading and errors.

Re claim 5, 17 and 39-40: Clay fails to teach that the bars of the bar code symbol are perpendicular to the lenticules of the lenticular lens. Clay also fails to teach that at least one of the plurality of lenticules overlays more than one bar of the bar code symbol. Clay also fails to teach that the lenticules are not parallel to the spaced apart elements of the bar code and the lenticules are normal to the spaced apart elements of the bar code.

Bravenec shows that the lenticules of a sheet of lenticular material may be perpendicular to the longitudinal axis (col 2 lines 24-30, Fig 1B).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to modify the teachings of Clay to the teachings of Bravenec and place a sheet of lenticular material having lenticules perpendicular to the bars of the barcode symbol because a barcode symbol reader may miread the lenticules as one of the bars of the bar symbol, and therefore, the modification would clearly distinctively show the difference between the bars and the lenticules and would avoid such mireadings and errors. Furthermore, one in ordinary skill in the art would also recognize that when the sheet of lenticular material having lenticles perpendicular to the bars of the barcode symbol would also comprise at least one of plurality of lenticules overlaying more than one bar of the bar code symbol.

11. Claims 7-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clay as applied to claim 1 above, and further in view of Addy (US 6,386,448).

Clay fails to teach a hand-held barcode scanner to read the bar code through the lenticules of the lenticular lens.

Addy teaches a hand-held scanner that scans or reads a product identification code such as a Universal Product Code (UPC) (col 5 lines 26-35).

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Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Addy to the teachings of Clay in order to read the barcode symbol on the image through the lenticules of the lenticular lens to uniquely identify the image or the product in a faster manner.

12. Claim 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clay as modified by Addy applied to claim 7 above, and further in view of McGinty et al (US 6,010,970).

Clay as modified by Addy fail to teach that the bar code symbol has an ANSI readability grade of at least a C and the bar code symbol is one of a Code 39 symbology, an Interleaved 2 of 5 symbology, a Codabar symbology, a Code 128 symbology, a Code 93 symbology, and a Postnet symbology.

McGinty teaches a bar code readability grade of C using Code 39 symbology (col 3 lines 47-51).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of McGinty to the teachings of Clay in order to create a clearly defined, but precise, barcode symbol so that the barcode can contain details or information on the product to identify the product in a faster manner.

13. Claims 12-15, 18-21 and 23-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clay in view of Goggins.

Re claim 12-15 and 25-29: Clay fails to teach that the lenticules of lenticular lens have a width of less than about 0.006667, a focal length and a gauge thickness and wherein the focal length is substantially equal to the gauge thickness, and the gauge thickness is less than about 10

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mils. Clay fails to disclose that the lenticular lens includes at least 150 lenticules per inch (LPI). Clay also fails to teach that the lens comprises an ultraviolet curable resin and a plastic material selected from the group consisting of: polyester vinyl, polycarbonate, polyvinyl chloride, polyethylene, terephthalate, and amorphous polyethylene terephthalate. Clay fails to teach that the lens comprises thermoplastic material, electron beam, and curable resin material.

Goggins teaches that the lenticules of the lenticular lens have a width of less than about 0.006667 (col 5 line 16), a focal length and a gauge thickness and wherein the focal length is substantially equal to the gauge thickness and the gauge thickness is less than about 10 mils (col 3 lines 59-61). Goggins also teaches that the lenticular lens has approximately 200 lines per inch or a lens width of about 0.00495 inches (col 12 lines 51-54). Goggins discloses that lenticular lens comprises an ultraviolet curable resin and a plastic material including one or more of: polyester vinyl, polycarbonate, polyvinyl chloride, polyethylene terephthalate, amorphous polyethylene terephthalate and the like (col 2 lines 40-44, col 14 lines 41-45). Goggins also discloses that the lens comprises thermoplastic material (col 14 lines 46-47) and electron beam curable resin material (col 14 lines 49-50).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Goggins to the teachings of Clay because the modification creates a high definition lenticular lens, therefore provides a clear and more precise image of the bar code, which leads to more accurate reading of the bar code by the scanner/reader.

Re claim 18-21 and 23-24: Clay fails to teach that the image is printed directly to the back surface of the lenticular lens by one of: sheet-fed printing, web-offset printing, flexographic

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printing, gravure printing, digital printing, and electronic deposition. Clay also fails to teach that the image is printed to the substrate by one of sheet-fed, web-offset, flexographic, gravure, digital printing, inkjet and electronic deposition.

Goggins discloses that the image is printed on the lens by one of: sheet-fed printing, web-offset printing, flexographic printing, gravure printing, digital printing, and electronic deposition printing. Goggins also discloses that the image is printed onto the substrate by one of: sheet-fed, web-offset, flexographic, gravure, digital, inkjet, and electronic deposition.

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Goggins to the teachings of Clay because the modification provides a good quality image printing on items, therefore provides a better quality image, which decreases the bar code reading errors by the scanner/reader.

Re claim 30: Clay fails to teach that the lenticular bar code image is applied to at least one of a package, a cup, a container, and a label.

Goggins teaches that the substrate can be a package, a container, a cup or a label.

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to modify the teachings of Clay to the teachings of Goggins in order to provide to prevent the items from getting lost or stolen, or to provide an identification to indicate to whom the items belongs to.

14. Claims 31-33 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clay as modified by Bravenec et al as applied to claim 5 above, and further in view of Addy. Clay has been discussed above.

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Clay fails to teach that the bar code symbol is a Universal Product Code (UPC) and is read by a bar code reader.

Addy teaches that a hand-held scanner scans or reads a product identification code such as a Universal Product Code (UPC).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Addy to the teachings of Clay as modified by Bravenec in order to read the barcode symbol on the image through the lenticules of the lenticular lens to uniquely identify the image or the product in a faster manner.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kumiko C. Koyama whose telephone number is 703-305-5425. The examiner can normally be reached on Monday-Friday 7am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 703-305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

kck
December 13, 2002



**THIEN M. LE
PRIMARY EXAMINER**